

**IN THE CLAIMS:**

Please cancel claims 1-28 without prejudice, and add new claims 29 to 48 as follows:

1-28. (Cancelled) .

29. (New) An apparatus for processing a semiconductor substrate, the apparatus comprising:

an enclosure;

a substrate support member disposed in the enclosure and configured to hold the substrate thereon and to move the substrate vertically;

a cavity ring disposed in the enclosure and configured to form a fluid volume in combination with the substrate support member;

a first peripheral catch cup disposed about a perimeter of the substrate support member; and

a second peripheral catch cup disposed about the perimeter of the substrate support member, wherein the first and second peripheral catch cups have different vertical levels.

30. (New) The apparatus of claim 29, wherein the first peripheral catch cup is configured to collect fluid from the fluid volume, and the second peripheral catch cup is configured to collect rinsing fluid from a surface of the substrate.

31. (New) The apparatus of claim 29, wherein the cavity ring is disposed above the substrate support member and the first peripheral catch cup is disposed vertically above the second peripheral catch cup.

32. (New) The apparatus of claim 29, wherein the first peripheral catch cup is connected to a solution drain and the second peripheral catch cup is connected to a rinse drain.

33. (New) The apparatus of claim 32, wherein the rinse drain is connected to a recycling system having a purifier.
34. (New) The apparatus of claim 29, further comprising a fluid inlet configured to supply a processing solution to the fluid volume.
35. (New) The apparatus of claim 29, further comprising a rinse spray spout disposed adjacent to the first periphery catch cup or the second periphery catch cup.
36. (New) The apparatus of claim 29, wherein the substrate support member is rotatable.
37. (New) The apparatus of claim 29, wherein the substrate support member comprises a vacuum chuck.
38. (New) The apparatus of claim 29, wherein the substrate support member comprises an annular seal adapted to receive the substrate.
39. (New) The apparatus of claim 29, further comprising a vibration actuator connected to the substrate support member.
40. (New) An apparatus for processing a semiconductor substrate, comprising:  
an enclosure;  
a substrate support member disposed in the enclosure, wherein the substrate support member is configured for supporting the substrate;  
a cavity ring disposed in the enclosure above the substrate support member, wherein the cavity ring is configured to be in contact a peripheral portion of the substrate;  
a solution inlet configured to supply a process solution to a fluid volume defined by the cavity ring and the substrate;

a solution catch cup having an inner annular surface disposed near a bottom surface of the cavity ring;

one or more rinse spray sprouts disposed below the solution catch cup; and

a rinse catch cup having an inner annular surface disposed below the one or more rinse spray sprouts.

41. (New) The apparatus of claim 40, wherein the substrate support member moves vertically in the inner annular surfaces of the solution catch cup and the rinse catch cup.

42. (New) The apparatus of claim 40, further comprising:

a rinse drain connected to the rinse catch cup; and

a purifier connected between the rinse drain and a rinse agent reservoir.

43. (New) The apparatus of claim 40, wherein the substrate support member is rotatable.

44. (New) The apparatus of claim 40, wherein the substrate support member comprises a vacuum chuck.

45. (New) The apparatus of claim 40, wherein the substrate support member comprises a port configured to provide a gas flow directed at a backside of the substrate.

46. (New) A method for processing a substrate, comprising:

loading the substrate onto a substrate support member;

positioning the substrate, in a first vertical position adjacent to a cavity ring and forming a fluid volume by contour of the cavity ring and the substrate;

flowing a process solution into the fluid volume continuously while collecting the process solution flowing from the fluid volume with a first catch cup;

positioning the substrate in a second vertical position; and

rinsing the substrate with a rinse agent while collecting the rinse agent with a second catch cup.

47. (New) The method of claim 46, further comprising rotating the substrate during the flowing the process solution and the rinsing the substrate.

48. (New) The apparatus of claim 46, further comprising vibrating the substrate during the flowing the process solution.